

App. Serial No. 10/510,590
Docket No.: NI.021099US

In the Claims:

Please amend the claims and enter new claims as indicated below. This listing of claims replaces all prior versions.

1. *(Currently amended)* A method of manufacturing an electronic device comprising a substrate with a metallization side, on which metallization an electrical element is present in a cavity that is bounded by the substrate and a cover, the method comprising the steps of: providing a foil; applying the foil to the metallization side of the substrate while forming the cavity, part of the foil forming the cover; and affixing the cover to the substrate, characterized in that a foil is provided which comprises a patterned layer on ~~the a~~ a first side and a sacrifice layer on ~~the a~~ a second side, the foil is placed to a protruding part of the substrate, an interstice between the substrate and the foil developing around the cavity; and the foil is affixed to the substrate by filling an interstice around the substrate with isolating material.

2. *(Currently amended)* A method as claimed in claim 1, characterized in that a patterned sub-layer is present in ~~the a~~ carrier between the patterned layer and the sacrifice layer, which patterned layer and sub-layer have a first and a second pattern which are mutually distinguished by a recess that has a larger diameter in the plane of the sub-layer than in the plane of the patterned layer, ~~thanks to which carrier~~ whereby the patterned layer is embedded in the isolating material when the isolating material is applied.

3. *(Original)* A method as claimed in claim 1, characterized in that the sacrifice layer is removed after the foil has been affixed to the substrate.

4. *(Original)* A method as claimed in claim 1, characterized in that the patterned layer contains a metal.

BEST AVAILABLE COPY

App. Serial No. 10/510,590
Docket No.: NL 021099US

5. *(Original)* A method as claimed in claim 4, characterized in that guiding tracks are present on the metallization side of the substrate beside the cavity, on which tracks electroconductive connectors are mounted prior to the mounting of the carrier, which connectors are brought into contact with tracks in the patterned layer when the carrier is mounted.
6. *(Original)* A method as claimed in claim 5, characterized in that the tracks in the patterned layer which are brought into contact with electrical connectors, are contact pads on which solder can be deposited.
7. *(Original)* A method as claimed in claim 1, characterized in that: a deformed foil is used as a foil, which deformed foil has a protrusion that is bounded by an edge; and the foil is affixed to the substrate so that the protrusion in the foil forms the cover of the cavity and the edge is in contact with the substrate.
8. *(Original)* An electronic device comprising a substrate with a metallization side on which metallization side an electrical element is present in a cavity that is bounded by the substrate and a cover, characterized in that as a cover a layer is present which is stuck to the substrate by isolating material that is situated in a space beside the cavity, the layer being mechanically embedded in the isolating material.
9. *(Original)* An electronic device as claimed in claim 8, characterized in that the mechanically embedded layer contains a metal.
10. *(Original)* An electronic device as claimed in claim 8, characterized in that the substrate comprises an integrated circuit.
11. *(Currently Amended)* An electronic device as claimed in claim 8 ~~and method as claimed in claim 1~~, characterized in that the electrical element is a micro-mechanical system (MEMS) element.

App. Serial No. 10/510,590
Docket No.: NL 021099US

2. (New) A method for manufacturing an electronic device, the method comprising:
providing a semiconductor substrate arrangement having an electronic circuit on a substrate;
forming a carrier arrangement having a conductive cover layer on a sacrificial layer and patterning the cover layer to separate portions thereof;
arranging the carrier arrangement with the cover layer facing the semiconductor substrate, a suspended portion of the carrier arrangement suspended above the semiconductor substrate leaving a gap therebetween, and a support portion of the cover layer supporting the carrier arrangement over the substrate arrangement;
filling the gap between the substrate arrangement and the carrier arrangement with an insulator material to couple the cover layer to the substrate and to seal a cavity between the electronic circuit and a portion of the cover layer suspended over the electronic circuit; and
removing the sacrificial layer to expose the cover layer.
13. (New) The method of claim 12, wherein filling the gap includes filling a patterned opening between different portions of the cover layer.
14. (New) The method of claim 12, wherein forming a carrier arrangement having a conductive cover layer includes forming a metallic conductive cover layer.
15. (New) The method of claim 12, further including forming a protrusion on the substrate, wherein arranging the carrier arrangement includes supporting the carrier arrangement on the protrusion.
16. (New) The method of claim 12, wherein forming a carrier arrangement includes forming a sacrificial layer having a depression therein and forming the conductive cover layer on the sacrificial layer, the conductive layer having a corresponding depression, and wherein arranging the carrier arrangement with the cover layer facing the semiconductor substrate includes inverting the cover layer and arranging the recessed portion of the

App. Serial No. 10/510,590
Docket No.: NL 0210991JS

cover layer over the electric circuit to form the cavity between the cover layer and the electronic circuit.

17. (New) The method of claim 12, further including forming a conductive contact protruding from the substrate and contacting a portion of the electronic circuit, wherein arranging the carrier arrangement includes arranging a portion of the cover layer to contact the conductive contact.

18. (New) The method of claim 17, wherein arranging a portion of the cover layer to contact the conductive contact includes arranging a contact portion of the cover layer on the conductive contact, the contact portion of the cover layer being separated via patterning from another portion of the cover layer suspended over the cavity.

19. (New) The method of claim 18, wherein filling the gap includes filling a patterned opening between the contact portion of the cover layer and the other portion of the cover layer suspended over the cavity.

20. (New) The device of claim 8, wherein the cover is patterned to separate a first portion from a second portion thereof, the first portion bounding the cavity and the second portion electrically coupled to the electrical element, the isolating material coupling both the first and second portions of the cover to the substrate.

21. (New) The device of claim 21, wherein the isolating material electrically isolates the first portion of the cover from the second portion of the cover.

BEST AVAILABLE COPY